



Enabling Grids for E-scienceE

Developer triggered builds

(or “*how we want to use ETICS*”)

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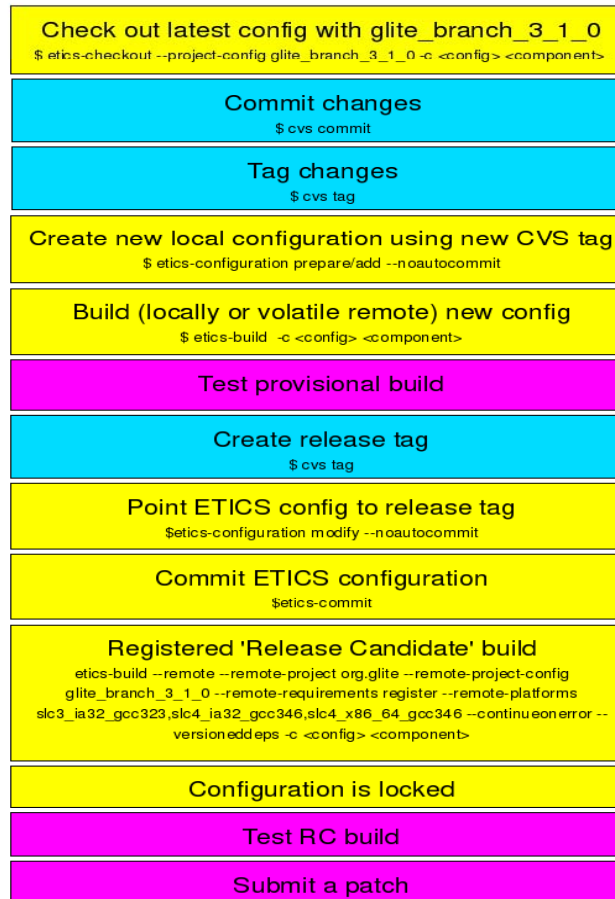
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- **gLite 3.0**
 - Developer commits changes and does local builds
 - A developer tags their component
 - The subsystem manager tags the subsystem
 - Integration team tags a release
 - Integration builds the release (or a part of it)
- **gLite 3.1**
 - Developer commits changes and does local builds
 - A developer tags their component
 - The subsystem manager tags the subsystem
 - Integration team updates release definition
 - Nightly build now includes updated tags

- The goal is to allow developers to trigger releasable builds. Patch submission would then involve referencing registered artifacts in the ETICS repository which have already been validated by the developer.
- The `glite_branch_3_1_0` will become a fixed baseline against which release candidate builds are made - it will only be altered to track API changes (approved via the EMT). Continuous 'branch' style builds can still be set up if required.
- This approach will
 - extend the scope of testing by ensuring the same rpm is tested by developers as well as by certification
 - reduce problems due to multiple/unreproducible builds
 - speed up the process by eliminating communication delays
 - allow build problems to be addressed directly by those most knowledgeable about the component.
 - ETICS now provides all necessary functionality, including local editing of configuration and archiving of build logs with the artifacts. Locking of configurations is expected soon (R1.3).

Developer triggered builds



Key: CVS ETICS Other

- **Patches will be accepted if the packages are**
 - Built remotely
 - Built against the correct project definition
 - Built with appropriate command line args (not overriding deps etc)
 - Configuration locked (this should be a pre-requisite for registration anyway)
 - For example
 - `etics-build --remote --remote-project org.glite --remote-project-config glite_branch_3_1_0 --remote-requirements register --remote-platforms slc3_ia32_gcc323,slc4_ia32_gcc346,slc4_x86_64_gcc346 --continueonerror --versioneddeps -c glite-info-provider-release_R_1_0_0_1 glite-info-provider-release`
- **Currently this is enforced by inspection, but we will try to automatically enforce as much as possible**

- **Developer triggered builds**
 - Issues with ‘local editing’
 - Configuration locking
 - Building of multiple subsystems simultaneously
- **General**
 - Externals
 - Binary injection
 - Handling of porting issues
 - Inequality logic for configurations
 - https://savannah.cern.ch/bugs/index.php?func=detailitem&item_id=25569
 - Apt/yum support in the repository
 - Bar is very high for someone contributing a utility script
- **Buy in from JRA1**
 - Do we have this?
 - ETICS still not used daily by developers
 - Frequent complaints about speed